First Hit Fwd Refs

L26: Entry 51 of 74 File: USPT Jul 2, 2002

US-PAT-NO: 6413751
DOCUMENT-IDENTIFIER: US 6413751 B1

TITLE: DNA adenine methyltransferases and uses thereof

DATE-ISSUED: July 2, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Benkovic; Stephen J.	State College	PA		
Berdis; Anthony	Shaker Heights	OH		
Lee; Irene	Shaker Heights	OH		
Shapiro; Lucy	Stanford	CA		
Wright; Rachel	Menlo Park	CA		
Stephens; Craig	Mountain View	CA		
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US-CL-CURRENT: 435/193; 536/23.2

CLAIMS:

What is claimed is:

1. An isolated DNA adenine methyltransferase wherein said methyltransferase has has an amino acid sequence as set forth in SEQ ID No. 6.

2. An isolated nucleic acid that encodes a Helicobacter pylori DNA methyltansferase having an amino acid sequence comprising.

3. An isolated nucleic acid of claim 2, wherein the nucleic acid comprises SEQ ID NO:7.

4. A nucleic acid of claim 2 contained in a genetically engineered cell.

5. An isolated DNA adenine methyltransferase having an amino acid sequence as set forth in SEQ ID NO: 8.

(Macrolides); 0 (R Factors); 11006-76-1 (Virginiamycin); 80738-43-8 (lincosamide)
Enzyme No.: EC 2.1.1. (Methyltransferases); EC 2.1.1.37 (DNA (Cytosine-5-)-Methyltransferase); EC 2.1.1.72 (Site-Specific DNA- **Methyltransferase** (**Adenine** -Specific))
Record Date Created: 19830729
Record Date Completed: 19830729

8/9/96

06015635 PMID: 6336742
Phenotypic reversal in dam mutants **of Escherichia coli K-12 by a recombinant** plasmid **containing the dam+ gene.**
Arraj J A; Marinus M G
Journal of bacteriology (UNITED STATES) Jan 1983, 153 (1) p562-5, ISSN 0021-9193 Journal Code: 2985120R
Contract/Grant No.: GM22055; GM; NIGMS
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
A recombinant **plasmid** , pMQ3, **carrying** the dam gene of Escherichia coli K-12, was constructed and **transformed** into dam+ and dam- strains. Both dam- and dam+ strains containing pMQ3 showed a wild phenotype for all traits, including **mutation** rate, except for a 10-fold increase in DNA adenine methylase activity.
Tags: Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Descriptors: DNA (Cytosine-5-)-Methyltransferase--genetics--GE; *Escherichia coli--genetics--GE; *Genes, Bacterial; *Methyltransferases--genetics--GE; * **Transformation** , Bacterial; Cloning, Molecular; DNA, Recombinant; Escherichia coli--enzymology--EN; **Mutation** ; Phenotype; **Plasmids** ; Site-Specific DNA- **Methyltransferase** (**Adenine** -Specific)
CAS Registry No.: 0 (DNA, Recombinant); 0 (Plasmids)
Enzyme No.: EC 2.1.1. (Methyltransferases); EC 2.1.1.37 (DNA (Cytosine-5-)-Methyltransferase); EC 2.1.1.72 (Site-Specific DNA- **Methyltransferase** (**Adenine** -Specific))
Record Date Created: 19830225
Record Date Completed: 19830225

8/9/97

03400957 PMID: 4949033
DNA restriction and modification mechanisms in bacteria.
Boyer H W
Annual review of microbiology (UNITED STATES) 1971, 25 p153-76, ISSN 0066-4227 Journal Code: 0372370
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
(128 Refs.)
Descriptors: *Bacteria; *Bacteriophages--growth and development--GD; *DNA, Viral; Adenosine Triphosphate--metabolism--ME; Base Sequence; Coliphages--metabolism--ME; Conjugation, Genetic; DNA Replication; DNA, Viral--biosynthesis--BI; Deoxyribonucleases--metabolism--ME; Escherichia coli--enzymology--EN; Genetic Complementation Test; Genetics, Microbial; Haemophilus--enzymology--EN; Hydrolysis; Lysogeny; Methylation; Methyltransferases--metabolism--ME; Models, Chemical; **Mutation** ; Phenotype ; Species Specificity; Transduction, Genetic; **Transformation** , Genetic